

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§ Group Art Unit: 2626
William K. Bodin, <i>et al.</i>	§
Serial No.: 10/733,941	§ Examiner: Rider, Justin W.
Filed: 12/11/2003	§ Atty Docket No.: AUS920030837US1
Title: Creating A Voice Response Grammar From A User Grammar	§ Customer No.: 34533
	§ Confirmation No.: 8707

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**APPEAL BRIEF**

**Honorable Commissioner:**

This is an Appeal Brief filed pursuant to 37 CFR § 41.37 in response to the Final Office Action of December 05, 2008 (hereinafter the “Final Office Action”), and pursuant to the Notice of Appeal filed March 4, 2009.

**REAL PARTY IN INTEREST**

The real party in interest in accordance with 37 CFR § 41.37(c)(1)(i) is the patent assignee, International Business Machines Corporation (“IBM”), a New York corporation having a place of business at Armonk, New York 10504.

## **RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences within the meaning of 37 CFR § 41.37(c)(1)(ii).

## **STATUS OF CLAIMS**

Status of claims in accordance with 37 CFR § 41.37(c)(1)(iii): Twenty-four (24) claims are filed in the original application in this case. Claims 3 and 9-24 were previously canceled. Remaining claims 1-2 and 4-8 are rejected in the Office Action. Claims 1-2 and 4-8 are on appeal.

## **STATUS OF AMENDMENTS**

Status of amendments in accordance with 37 CFR § 41.37(c)(1)(iv): No amendments were submitted after final rejection. The claims as currently presented are included in the Appendix of Claims that accompanies this Appeal Brief.

## **SUMMARY OF CLAIMED SUBJECT MATTER**

Appellants provide the following concise summary of the claimed subject matter according to 37 CFR § 41.37(c)(1)(v). This summary includes a concise explanation of the subject matter defined in each of the independent claims involved in the appeal and includes references to the specification by page and line number and to the drawings by reference characters. The independent claim involved in this appeal is claim 1.

Claim 1 recites a method for creating a voice response grammar in a voice response server (page 7, lines 5-6). The method of claim 1 includes identifying a user for a presentation, the user having a user grammar, the user grammar including one or more user grammar elements for a content type (page 27, lines 13-16, and Figure 13, elements 208, 372, 374, and 378), each user grammar element including an identifier of a structural

element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action (page 28, lines 11-15, and Figure 5, elements 318, 516, and 518). The method of claim 1 also includes identifying presentation documents for the presentation, each presentation document having a content type (page 28, lines 17-20 and Figure 13, elements 382, 118, 386, 370 and 356). The method of claim 1 also includes selecting user grammar elements according to the content type of the identified presentation documents (page 28, lines 21-25, and Figure 13, elements 384, 386, 370, and 356). The method of claim 1 also includes storing a multiplicity of user grammar elements for the user in a voice response grammar on a voice response server, including storing the selected user grammar elements in the voice response grammar (page 28, lines 25-28, and Figure 13, elements 105 and 386).

#### **GROUNDS OF REJECTION**

In accordance with 37 CFR § 41.37(c)(1)(vi), Appellants provide the following concise statement for each ground of rejection:

1. Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bryan, *et al.* (U.S. Publication No. 2002/0146015) in view of Begel, *et al* (“SpeedNav: Document Navigation By Voice,” University of California, Berkeley, October 9, 2002).

#### **ARGUMENT**

Appellants present the following argument pursuant to 37 CFR § 41.37(c)(1)(vii) regarding the grounds of rejection on appeal in the present case.

**Argument Regarding The Sole Ground For Rejection On Appeal:  
Claims 1-2 And 4-8 Stand Rejected Under 35 U.S.C. § 103(a)  
As Being Unpatentable Over Bryan In View Of Begel**

Claims 1-2 and 4-8 stand rejected for obviousness under 35 U.S.C. § 103(a) as being unpatentable over Bryan, et al. (U.S. Publication No. 2002/0146015) (hereafter, ‘Bryan’) in view of Begel, et al. (“SpeedNav: Document Navigation By Voice”, University of California , Berkeley, October 9, 2002) (hereafter, ‘Begel’). The question of whether Appellants’ remaining claims are obvious or not is examined in light of: (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations, including commercial success, long felt but unsolved needs, and failure of others. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398. Although Appellants recognize that such an inquiry is an expansive and flexible one, the Office Action must nevertheless demonstrate a *prima facie* case of obviousness to reject Appellants’ claims for obviousness under 35 U.S.C. § 103(a). *In re Khan*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). To establish a *prima facie* case of obviousness, the proposed combination of Bryan and Begel must teach or suggest all of Appellants’ claim limitations. *Manual of Patent Examining Procedure* § 2142 (citing *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974)). Independent claim 1 of the present application recites:

1. A method for creating a voice response grammar in a voice response server, the method comprising:
  - identifying a user for a presentation, the user having a user grammar, the user grammar including one or more user grammar elements for a content type, each user grammar element including an identifier of a structural element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action;
  - identifying presentation documents for the presentation, each presentation document having a content type;
  - selecting user grammar elements according to the content type of the identified presentation documents; and

storing a multiplicity of user grammar elements for the user in a voice response grammar on a voice response server, including storing the selected user grammar elements in the voice response grammar.

As discussed in more detail below, the cited combination of references does not teach or suggest each and every element and limitation of Appellants' claims. The cited combination of references therefore cannot be used to establish a *prima facie* case of obviousness against the claims of the present application.

**Bryan Does Not Teach Or Suggest  
Identifying A User For A Presentation**

The Office Action takes the position that Bryan at paragraphs 0034, 0036, 0068, and Bryan's Abstract teaches or suggests the following limitation of claim 1: identifying a user for a presentation, the user having a user grammar, the user grammar including one or more user grammar elements for a content type, each user grammar element including an identifier of a structural element. Appellants respectfully note in response, however, that the Abstract of Bryan discloses creating, using, and updating individual user voice portals in a multi-user environment through grammars consisting of vocabulary words or audio macros that speech recognition hardware and software recognize for a particular user. Bryan at paragraph 0034 discloses that those audio macros are the words the listener assigns to access either a specific source or piece of information. As disclosed in Bryan at paragraph 0036, first time users may utilize Bryan's login module with a registration component to provide basic set-up information, and Bryan at paragraph 0068 discloses that each user is assigned a unique identifier that is used to associate that user with a particular voice portal. Bryan, at the reference points cited above and all other reference points in Bryan, however, does not disclose identifying a user for a presentation, the user having a user grammar, the user grammar including one or more user grammar elements, each user grammar element including an identifier of a structural element as claimed in the present application because Bryan does not disclose a user grammar as claimed in the present application. The claims of the present application recite that a grammar includes *one or more user grammar elements for a content type*,

wherein each user grammar element includes, among other things, *an identifier of a structural element*. In contrast to the claims of the present application, Bryan at paragraph 0034 describes Bryan's grammars as merely a "set of vocabulary words or audio macros that speech recognition hardware and software must recognize for a particular user." Nowhere, however, does Bryan describe that Bryan's grammars include *one or more user grammar elements for a content type* wherein each user grammar element includes, among other things, *an identifier of a structural element an identifier of a structural element*.

In response to arguments above, the Examiner states in the Office Action of June 12, 2008:

Further, appellant asserts BRYAN'S grammars merely being a "set of vocabulary words or audio macros that speech recognition hardware or software must recognize for a particular user." The examiner asserts that appellant's grammars are also merely a "set of vocabulary words or audio macros that speech recognition hardware or software must recognize for a particular user" that just happens to be directed toward document navigation.

Appellants respectfully note in response, however, that any assertion that Appellants' user grammar is "also merely a set of vocabulary words or audio macros that speech recognition hardware or software must recognize for a particular user" stands in stark contradiction to what is claimed and disclosed in the present application. Claim 1 of the present application unambiguously states that the user grammar claimed in the present application includes "one or more user grammar elements for a content type, each user grammar element including an identifier of a structural element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action." That is, in the claim language itself, Appellants define a user grammar as much more than "a set of vocabulary words or audio macros that speech recognition hardware or software must recognize for a particular user." Furthermore, in Appellants' original specification Appellants disclose that a user grammar is a *data structure* that *includes* a set of key phrases that are used to select presentation action identifiers specific to a user for use in formulating presentation control instructions. That

is, the set of key phrases used in formulating presentation control instructions are an element of a user grammar – not the user grammar itself. As such, any assertion that equates the user grammar claimed in the present application to Bryan's grammar is simply not supported by the claims or specification in the present case. In fact, such an assertion contradicts what is claimed and disclosed in the present application. Because Bryan never once teaches that Bryan's set of vocabulary words include an identifier of a structural element, a key phrase for invoking a presentation action, or a presentation action identifier representing a presentation action, Bryan's grammar cannot reasonably be viewed as teaching or suggesting the user grammar claimed in the present application.

Because Bryan does not teach the limitations against which it is cited, the combination of Bryan and Begel does not teach or suggest each and every element and limitation of claim 1 of the present application. The combination of Bryan and Begel therefore cannot be used to establish a *prima facie* case of obviousness against claim 1 of the present application. The rejection of claim 1 under 35 U.S.C. § 103 should therefore be withdrawn and the claim should be allowed.

**Bryan Does Not Teach Or Suggest Selecting User  
Grammar Elements According To The Content  
Type Of The Identified Presentation Documents**

Claim 1 of the present application includes the following limitation previously recited in claim 3 of Appellants' original application: selecting user grammar elements according to the content type of the identified presentation documents. In rejecting former claim 3, the Office Action takes the position that the above recited limitation is taught by Bryan at paragraph 0062. Appellants respectfully note in response, however, that what Bryan at paragraph 0062 actually discloses is:

[0062] According to an important aspect of the invention, topic radio engine 104 presents one or more templates to each user to collect information from the user regarding information sources, search keywords, search time windows, and audio macros for accessing search results. In the illustrated embodiment, these templates are stored in topic radio template database 108. The particular template presented to an individual user may depend on the type of user. For example, if the user is

a cardiologist, the template may contain lists of medical journals from which information may be extracted. Alternatively or in addition to user-tailored templates, users may be presented with generic templates, such as news templates, weather templates, sports templates, etc., that allow users to define audio macros and data sources for these categories of information. In another example, if the user is an individual investor, the template may contain stock information and allow the user to select stock information to be included in his or her voice portal. If the user is a company, the template may allow the user to select from information provided on the company's web site. Once the user completes the templates, the template is stored in topic radio template database 108 and used in providing a unique voice portal for a particular user.

That is, Bryan at the cited reference point teaches providing templates to each user to collect information from the user regarding information sources, search keywords, search time windows, and audio macros for accessing search results. Bryan further discloses that such templates may be generic or tailored to the individual user. Bryan's templates, however, neither teach nor suggest selecting user grammar elements according to the content type of the identified presentation documents as claimed in the present application for two reasons. First, Bryan does not teach or suggest selecting user grammar elements. Second, Bryan does not teach or suggest presentation documents with associated content types.

Bryan does not teach or suggest selecting user grammar elements as claimed in the present application. Claim 1 of the present application explicitly recites that a user grammar element is selected. A user grammar element, as claimed in the present application, includes an identifier of a structural element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action. As discussed above, Bryan does not teach or suggest anything remotely related to a user grammar element which includes an identifier of a structural element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action. In fact, the cited reference point provides a wholly unrelated teaching to what is claimed in the present application – the cited reference teaches collecting user information through the use of a template so that a voice portal can be created for a user search specified data sources and subsequently access search results. In

contrast, the limitation above claims the selection of a user grammar element in accordance with the content type of a presentation document. Because Bryan does not teach or suggest selecting user grammar elements, Bryan cannot possibly teach or suggest *selecting user grammar elements according to the content type of the identified presentation documents as claimed in the present application.*

In addition to the fact that Bryan does not teach or suggest selecting user grammar elements, Bryan also fails to teach or suggest presentation documents with associated content types. The “content type” of the identified presentation document refers to the actual file format of the document itself. Appellants original specification at page 12, lines 8-20, states that identifying the content type may be carried out, for example, by identifying the content type in dependence upon a filename extension in the filename of an original document. Examples of filename extension identifying content type include ‘pdf’ for Adobe’s Portable Document Format, ‘xls’ for a Microsoft Excel spreadsheet, ‘doc’ for a word processing document, ‘xml’ for an XML document. Alternatively, identifying the content type may be carried out by identifying the content type in dependence upon document header elements in an original document.

In rejecting the claim limitation recited above, the Office Action includes the following text from paragraph 0062: ‘*that allow users to define audio macros and data sources for these categories of information.*’ Presumably, the Office Action is asserting that the ‘categories of information’ disclosed by Bryan teach or suggest the content type of the identified presentation documents as claimed in the present application. In fact, the ‘categories of information’ taught in Bryan refer to the *subject matter* of the content being searched. Bryan, for example, identifies stock reports and weather reports as exemplary ‘categories of information.’ See, Bryan at paragraph 0012. That is, a category of information is determined by the subject matter that the information relates to – not the particular file format type of the content. As such, the cited reference point cannot be said to teach or suggest presentation documents with associated content types. Because Bryan does not teach or suggest presentation documents with associated content types, Bryan cannot possibly teach or suggest selecting user grammar elements *according to the*

*content type of the identified presentation documents* as claimed in the present application.

Because Bryan does not teach the limitations against which it is cited, the combination of Bryan and Begel does not teach or suggest each and every element and limitation of claim 1 of the present application. The combination of Bryan and Begel therefore cannot be used to establish a *prima facie* case of obviousness against claim 1 of the present application. The rejection of claim 1 under 35 U.S.C. § 103 should therefore be withdrawn and the claim should be allowed.

### **Relations Among Claims**

Claims 2 and 4-8 depend from independent claim 1. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because the combination of Bryan and Begel cannot be used to establish a *prima facie* case of obviousness against claim 1 of the present application, the combination of Bryan and Begel cannot possibly be used to establish a *prima facie* case of obviousness against the dependent claims of the present application. The rejections of claims 2 and 4-8 therefore should be withdrawn, and these claims also should be allowed.

### **Conclusion Of Appellant's Arguments**

Claims 1-2 and 4-8 stand rejected for obviousness under 35 U.S.C. § 103 as being unpatentable over the combination of Bryan and Begel. The combination of Bryan and Begel does not teach or suggest each and every element and limitation of the claims in the present application. As such, the combination of Bryan and Begel cannot be used to establish a *prima facie* case of obviousness against the claims of the present application. Claims 1-2 and 4-8 are therefore patentable and should be allowed. Appellants respectfully request reconsideration of claims 1-2 and 4-8.

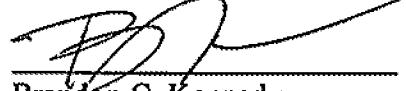
In view of the arguments above, reversal on all grounds of rejection is requested.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

Date: April 14, 2009

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**APPENDIX OF CLAIMS  
ON APPEAL IN PATENT APPLICATION OF  
WILLIAM K. BODIN, ET AL., SERIAL NO. 10/733,941**

**CLAIMS**

**Listing of Claims:**

1. A method for creating a voice response grammar in a voice response server, the method comprising:
  - identifying a user for a presentation, the user having a user grammar, the user grammar including one or more user grammar elements for a content type, each user grammar element including an identifier of a structural element, a key phrase for invoking a presentation action, and a presentation action identifier representing a presentation action;
  - identifying presentation documents for the presentation, each presentation document having a content type;
  - selecting user grammar elements according to the content type of the identified presentation documents; and
  - storing a multiplicity of user grammar elements for the user in a voice response grammar on a voice response server, including storing the selected user grammar elements in the voice response grammar.
2. The method of claim 1 wherein identifying a user for a presentation comprises:
  - creating a data structure representing a presentation; and

listing in the data structure at least one user identification.

3. (Canceled)
4. The method of claim 1 wherein the user grammar comprises a multiplicity of user grammar elements, the method further comprising:

identifying presentation documents for the presentation, the presentation documents including structured documents having structural element identifiers; and

selecting user grammar elements in dependence upon the structural element identifiers;

wherein storing a multiplicity of user grammar elements for the user in a voice response grammar on a voice response server includes storing the selected user grammar elements in the voice response grammar.

5. The method of claim 1 wherein the user grammar comprises a multiplicity of user grammar elements, the method further comprising:

identifying presentation documents for the presentation, each presentation document having a presentation grammar including presentation action identifiers; and

selecting user grammar elements in dependence upon the presentation action identifiers;

wherein storing a multiplicity of user grammar elements for the user in a voice response grammar on a voice response server includes storing the selected user grammar elements in the voice response grammar.

6. The method of claim 1 further comprising creating a presentation document, including:

creating, in dependence upon an original document, a structured document comprising one or more structural elements;

classifying a structural element of the structured document according to a presentation attribute; and

creating a presentation grammar for the structured document, wherein the presentation grammar for the structured document includes grammar elements each of which includes an identifier for at least one structural element of the structured document.

7. The method of claim 6 wherein classifying a structural element comprises:

identifying a presentation attribute for the structural element;

identifying a classification identifier in dependence upon the presentation attribute; and

inserting the classification identifier in association with the structural element in the structured document.

8. The method of claim 6 wherein creating a presentation grammar for the structured document comprises:

identifying the content type of the original document;

selecting, in dependence upon the content type, a full presentation grammar from among a multiplicity of full presentation grammars; and

filtering the full presentation grammar into a presentation grammar for the structured document in dependence upon the structural elements of the structured document.

Claims 9-24 (Canceled).

**APPENDIX OF EVIDENCE  
ON APPEAL IN PATENT APPLICATION OF  
WILLIAM K. BODIN, *ET AL.*, SERIAL NO. 10/733,941**

This is an evidence appendix in accordance with 37 CFR § 41.37(c)(1)(ix).

There is in this case no evidence submitted pursuant to 37 CFR §§ 1.130, 1.131, or 1.132, nor is there in this case any other evidence entered by the examiner and relied upon by the Appellants.

**RELATED PROCEEDINGS APPENDIX**

This is a related proceedings appendix in accordance with 37 CFR § 41.37(c)(1)(x).

There are no decisions rendered by a court or the Board in any proceeding identified pursuant to 37 CFR § 41.37(c)(1)(ii).